



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE NUMBER USA/0560/S, REVISION 1**

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>2</sup> and the United States of America<sup>1</sup> for the transport of radioactive materials.

1. Source Identification - JLS & A Model No. 7810-150.
2. Source Description - The source is a double encapsulation constructed of Type 304 stainless steel and sealed by heliarc welds. Maximum outside dimensions are 31.5 mm (1.25 in) diameter by 61.5 mm (2.42 in) long. The capsules are constructed in accordance with J. L. Shepherd and Associates Drawing No. A-0563-4241-150, Rev. A (attached).
3. Radioactive Contents - Not more than 240.5 TBq (6500 Ci) of Cobalt-60 as solid metal pellets or rods.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations<sup>1</sup> shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires August 31, 2009.

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated August 4, 2004 submitted by J. L. Shepherd & Associates, San Fernando, CA, and in consideration of other information on file in this Office.

Certified by:

*for* Charles H. Hochman  
Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

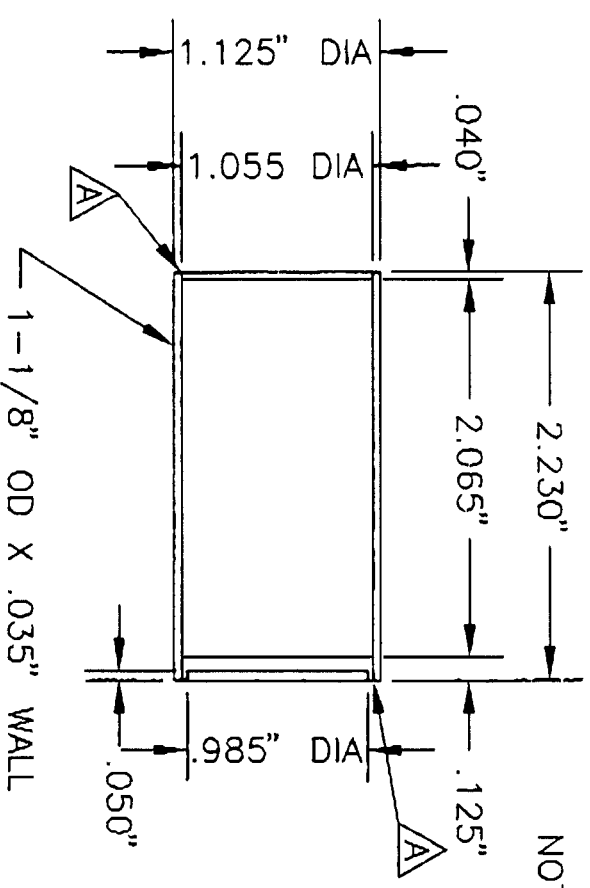
AUG - 6 2004

(DATE)

Revision 1 - Issued to update to the 1996 IAEA regulations and to extend the expiration date.

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1 "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

2 Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.



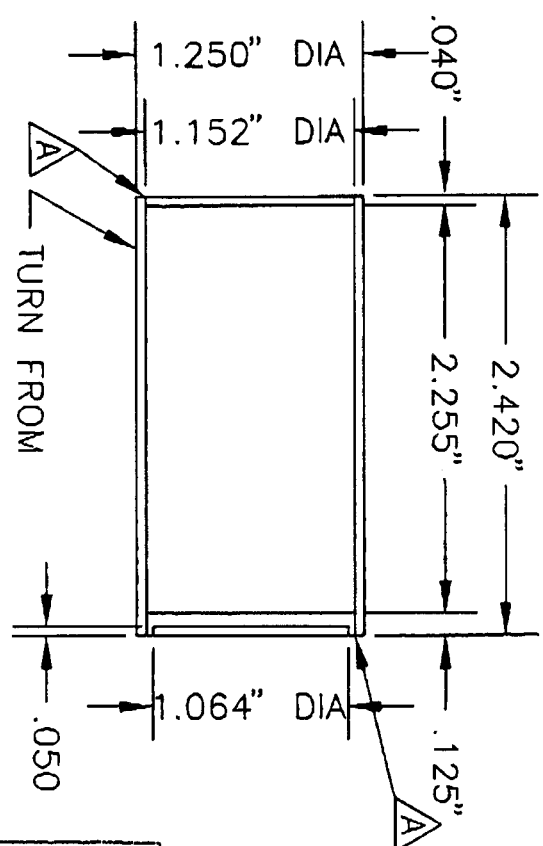
NOTE:

1. MATL = 304 STAINLESS STL.
2. END CAPS TO HAVE .004 REGISTER &.0005 INTERFERENCE FIT, 100% HELIARC WELDED. (SEE NOTE A )
3. CAPSULES TO BE CERTIFIED "SPECIAL FORM" PER US DOT 40CFR173.469, 10-1-95 EDITION AND IAEA SAFETY SERIES NO. 6, 1985 EDITION AS AMENDED 1990.

4. REMOVEABLE CONTAMINATION  $\leq 5 \times 10^{-5}$  uCi.  
PER ANSI N 43.6-1997 AND ISO 9978, 1992-02-15.

5. INSIDE CONTENTS - COBALT-60  
CHEMICAL FORM - METAL 1mm PELLETS  
OR 1/4 DIA RODS

6. MAXIMUM ACTIVITY - (6500 Ci) COBALT-60  
7. ANSI N43.6-1997 AND ISO 2919, 1980-005-01  
PERFORMANCE CLASSIFICATION C-43434.



OUTER CAPSULE

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCE				J. L. SHEPHERD and Associates			
DECIMALS	FRACTIONS	ANGULAR	TITLE	INNER & OUTER SOURCE CAPSULE			
.X ± .030				7810-150			
.XX ± .010	± 1/16	± 30°					
.XXX ± .005							
DRAWN	DATE	SIZE	MODEL	DWG NO.	REV		
D. TRAN	27AUG98	A	7810-150	A-0563-4241-150	A		
APPROVED	SCALE	SHEET		1 OF 1			
7/2/98	FULL						